

## MOTIVATED STUDENT FOR TEST BENCH DESIGN (MATLAB)

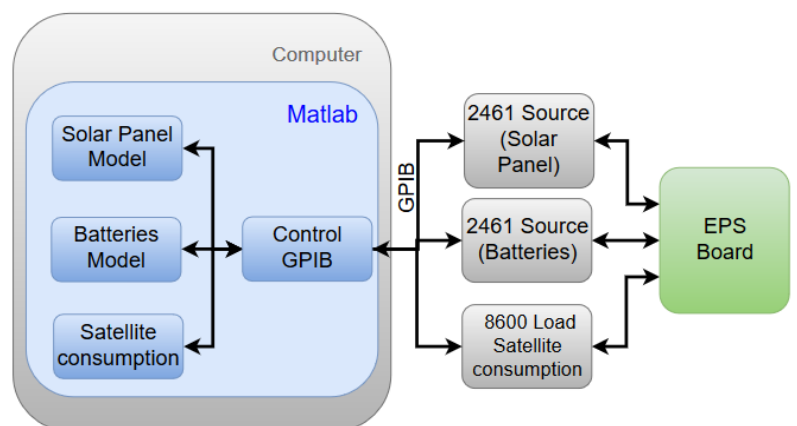
### 1 BACKGROUND

The mission objective of ROBUSTA-3A Méditerranée is to demonstrate the ability of a 3U CubeSat based system to collect meteorological data onboard a ship located in the western Mediterranean Sea (between France, Spain, Italy, and North Africa) and rapidly transfer this data to Meteo France for storm forecasting.

The Cubesat is developed by students at the Centre Spatial Universitaire the Montpellier. One important part of the satellite development is the design, developing and test of the EPS. The Electrical Power System (EPS) is responsible for harvesting and managing energy distribution and storage.

### 2 INTERNSHIP DESCRIPTION

CSU is looking for motivated students to learn and help with the development of test bench of the EPS of a 3U CubeSat. The test bench will have 3 sources controlled by MATLAB, which will simulate the behavior of solar panels, batteries and satellite consumption. The student will have to program in MATLAB a controller that controls the sources: 2461 source meter (KEITHLEY), and the electronic load 8600 (BK PRECISION).



Skills: Programming in MATLAB and basic knowledge about instrumentation.

Level: Open to BSc and MSc students

Location: CSU in campus Saint-Priest, Montpellier.

Duration: 2 to 6 months (For 6 months internship another task may be added related to EPS)

Supervisor, Function at CSUM: Sara VEGA MARTINEZ, EPS engineer.

THIS INTERNSHIP IS REMUNERATED.

### CONTACT

Please upload your application at <https://csu.edu.umontpellier.fr/en/job-offers-internship/>